

DESCRIPTION AMENDMENTS

Rewrite the paragraph beginning on page 4, line 8, to read as follows:

According to one ~~embodiment~~ aspect of the present invention there is provided a system for measuring the flight of a projectile, comprising: a projectile comprising an exterior surface and a set of orientation identifiers distributed over the exterior surface, such that, for every orientation of the projectile, there exists, from any fixed perspective, a unique viewable configuration of a sub-set of the identifiers; means for capturing a first image of the surface of the projectile at a first time, the first image including a first configuration of a first sub-set of the orientation identifiers; means for determining the orientation of the projectile from the first configuration; means for capturing a second image of the surface of the projectile at a second time, the second image including a second configuration of a second sub-set of the orientation identifiers; means for determining the orientation of the projectile from the second configuration; and means for determining the rotational velocity of the projectile in flight from its orientation at the first time and its orientation at the second time.

Rewrite the paragraph beginning on page 4, line 23, to read as follows:

According to another ~~embodiment~~ aspect of the present invention there is provided a computer program comprising computer program instructions that when loaded into a computer provide means for determining the orientation of a projectile from a given configuration of a sub-set of the orientation identifiers, wherein the projectile comprises an exterior surface and a set of orientation identifiers distributed over the exterior surface, such that, for every orientation of the projectile, there exists, from any fixed perspective, a unique viewable configuration of a sub-set of the identifiers.

Rewrite the paragraph beginning on page 5, line 1, to read as follows:

According to another ~~embodiment~~ aspect of the present invention there is provided a method of determining the placement of

orientation identifiers on the exterior surface of a projectile, comprising: a) defining an initial set of identifiers; b) distributing the set of identifiers over the surface of a simulated projectile; c) testing the existence of unique configurations of viewable identifiers for different orientations of the simulated projectile; d) adapting the distribution of identifiers, if the test fails, otherwise, simplifying the set of identifiers and returning to step b); and e) terminating the method.

Rewrite the paragraph beginning on page 5, line 10, to read as follows:

According to another ~~embodiment~~ aspect of the present invention there is provided a projectile comprising an exterior surface and a minimal set of orientation identifiers distributed over the exterior surface, such that, for every orientation of the projectile, there exists, from any fixed perspective, a unique viewable configuration of a sub-set of the identifiers.

Rewrite the paragraph beginning on page 5, line 16, to read as follows:

According to another ~~embodiment~~ aspect there is provided a method of marking a projectile such that any view of the surface of the projectile displays a pattern of projected markings that is unique to that view and to any rotation of that view; the method comprising the following steps:

- (a) approximating the surface of said projectile by a polygonal mesh;
- (b) choosing an initial number of markings as a trial number;
- (c) distributing said number of markings at random about said polygonal mesh;
- (d) applying an appropriate algorithm to remove from said distribution of markings any non-uniqueness of view within the region of confidence, and any perceived rotational symmetry in any one view;
- (e) reducing said number of markings, and repeating steps (c) and (d) above; and
- (f) repeating this process until no mathematical solution is obtainable;

the number and distribution of markings applicable to the projectile being determined by the solutions thereby obtained.